

In the Claims:

1. (canceled)

2. (currently amended) The method of claim 44, wherein:

a portion of the mold cavity is formed from a vacuum bag.

3. (canceled)

4. (currently amended) ~~The method of claim 1, A method for forming composite components, the method comprising:~~

(a) providing a mold having a mold cavity, at least a portion of the mold cavity having a selected shape for forming a composite component;

(b) providing sections of adjacent fibers, the fibers being parallel to each other and being coated with a fugitive binder that adheres the fibers to each other;

(c) arranging the fibers within the mold cavity and assembling the mold; then

(d) heating the fibers to a temperature sufficient to pyrolyze the binder leaving no charred material or residue in the mold other than the fibers; then

(e) injecting resin into the mold cavity, the resin forming a matrix enclosing the fibers; then

(f) curing the resin; and then

(g) removing the composite component from the mold cavity; wherein:

step (a) comprises providing a mold that has at least one injection port and at least one vent port, the ports communicating an exterior of the mold and the mold cavity; and

step (d) further comprises flowing a heated gas into the mold cavity through the injection port and out of the mold cavity through the vent port, the heated gas pyrolyzing the fugitive binder.

5. (original) The method of claim 4, wherein:

the gas is nitrogen.

6. (currently amended) The method of claim ~~4~~⁴, wherein:

the fugitive binder is an aliphatic, thermoplastic, organic polymer.

7. (currently amended) The method of claim ~~4~~⁴, wherein:

the fugitive binder is water soluble.

8. (currently amended) The method of claim ~~4~~⁴, wherein:

the fugitive binder is selected from the group consisting of hydroxypropyl cellulose, hydroxyethyl cellulose, hydroxymethyl cellulose, polyvinyl alcohol, polyvinyl pyrrolidone and polyvinyl acetate.

9. (currently amended) The method of claim ~~4~~⁴, wherein:

the fibers are formed from a plurality of carbon fibers.

10. (currently amended) The method of claim ~~4~~⁴, wherein:

the fibers are formed from a material selected from the group consisting of glass, ceramic oxide, alumina, aluminosilica, alumina zirconia yttria, aluminoborosilicate, and silicon carbide.

11. (canceled)

12. (canceled)

13. (currently amended) The method of claim 1214, wherein:

a portion of the mold cavity is formed from a vacuum bag.

14. (currently amended) The method of claim 12, A method for forming composite components, the method comprising:

(a) providing mold having a mold cavity, at least a portion of the mold cavity having a selected shape for forming a composite component, the mold also having at least one injection port and at least one vent port, the ports communicating an exterior of the mold and the mold cavity;

(b) providing sections of unidirectional fibers that are coated with a fugitive binder that adheres the fibers to each other;

(c) arranging the fibers within the mold cavity and assembling the mold; then flowing a gas into the mold cavity through the injection port and out of the mold cavity through the vent port while heating the fibers to a temperature sufficient to pyrolyze the binder leaving no charred material or residue in the mold other than the fibers; then

(d) injecting resin into the mold cavity through the injection port, the resin forming a matrix enclosing the fibers; then

(e) heating the mold to cure the resin; and then

(f) removing the composite component from the mold cavity; and wherein:

step (d) further comprises heating the gas flowing through the mold cavity prior to flowing the gas through the mold cavity.

15. (original) The method of claim 14, wherein:

the gas is nitrogen.

16. (currently amended) The method of claim ~~12~~¹⁴, wherein:

the fugitive binder is an aliphatic, thermoplastic, organic polymer.

17. (currently amended) The method of claim ~~12~~¹⁴, wherein:

the fugitive binder is water soluble.

18. (currently amended) The method of claim ~~12~~¹⁴, wherein:

the fugitive binder is selected from the group consisting of hydroxypropyl cellulose, hydroxyethyl cellulose, hydroxymethyl cellulose, polyvinyl alcohol, polyvinyl pyrrolidone and polyvinyl acetate.

19. (currently amended) The method of claim ~~12~~¹⁴, wherein:

the fibers are formed from a plurality of carbon fibers.

20. (currently amended) The method of claim ~~1214~~, wherein:

the fibers are formed from a material selected from the group consisting of ceramic oxide, alumina, aluminosilica, alumina zirconia yttria, aluminoborosilicate, and silicon carbide.

21. (currently amended) The method of claim ~~1214~~, further comprising:

after step (d) and before step (e), drawing a vacuum on the mold cavity.

22. – 24 (canceled)